

## Make a Balancing Clown

Illustrated by Laurel Aiello

Work with a partner. Have your partner stand with his/her feet about 2 feet apart. Ask your partner to balance on one foot. Watch how your partner does this. Did you observe your partner move his/her shoulders? Your partner cannot balance unless his/her shoulders are shifted. This shift changes where most of your body's mass is located.

### What You Need

this page  
scissors  
index card  
2 pennies  
tape

### Making Your Clown

1. Print this page. Cut out the clown.
2. Place it on any size index card and trace it.
3. Cut out the clown and color it.
4. Try balancing the clown on your finger. This should be easy to do.
5. Now here is the challenge. Using two pennies and tape, make the clown balance on its chin while it rests on your fingertip. Its chin can also rest on a pencil eraser. Hint: Tape the pennies so that they hang from the clown.

### Why It Balances

Just as your partner changed his/her balancing point, or his/her center of mass, adding pennies changes the center of mass of the clown. Changing the center of mass is also called changing the center of gravity. The center of mass is where all the weight is located.

### More Fun

Make a larger clown on an index card. Pennies may no longer make it balance on your fingertip. You may have to use nickels, quarters, or washers to change its center of mass.

### Literature Link

Read *Mirette on a High Wire* by Emily Arnold McCully. The main character is taught how to walk a tightrope, which is a wire or rope stretched between two high points.

